

DK-LOK® Ball and Plug Valves

V23 Series Plug Valves



- Working Pressure: 3,000 psig
- Stainless Steel and Brass
- DK-LOK® 1/8" to 1/2" OD.
- Pipe Thread 1/8" to 1/2"
- Forward Flow Throttling

V81 Series General Purpose Ball Valves



- Working Pressure: 2,000 psig
- Stainless Steel and Brass
- DK-LOK® 1/4" to 1" OD.
- Pipe Thread 1/4" to 1"

V82 Series Lowest Dead Volume Ball Valves



- 2-way and 3-way Actuation
- Working Pressure: 3,000 psig
- Stainless Steel and Brass
- DK-LOK® 1/16" to 3/4" OD.
- Pipe Thread 1/8" to 1/2"

V824 Series Lowest Dead Volume Ball Valves



- Crossover 4-way Ball Valves
- Working Pressure: 2,500 psig
- Stainless Steel
- Pipe Thread 1/8" to 1/2"

V825 Series Lowest Dead Volume Ball Valves



- Switching 5-way Ball Valves
- Working Pressure: 2,500 psig
- Stainless Steel
- Pipe Thread 1/8" to 1/2"

V83 Series Swing-Out Ball Valves



- Working Pressure: 3,000 psig
- Stainless Steel and Carbon Steel
- DK-LOK® 1/4" to 1" OD.
- Pipe Thread 1/8" to 1"

V86 Series High Pressure Ball Valves



- 2-way On-Off Valves
- 3-way Diverter Valves
- Working Pressure: 10,000 psig
- Stainless Steel and Carbon Steel
- DK-LOK® 1/4" to 1" OD.
- Pipe Thread 1/4" to 1"

VT86 Series Trunnion Ball Valves



- 2-way On-Off Valves
- 3-way Switching Valves
- Working Pressure: 6,000 psig
- Stainless Steel
- DK-LOK® 1/4" to 1/2" OD.
- Pipe Thread 1/8" to 1/4"

VTH86 Series Trunnion Ball Valves



- 2-way On-Off Valves
- 3-way Switching Valves
- Working Pressure: 10,000 psig
- Stainless Steel
- DK-LOK® 1/4" to 1/2" OD.
- Pipe Thread 1/8" to 1/4"
- Seat Material: PEEK

VH86 Series Multi-Purpose Ball Valves



- 2-way Bi-directional Valves
- 3-way Diverter Valves
- Working Pressure: 6,000 psig
- Stainless Steel
- DK-LOK® 1/8" to 3/4" OD.
- Pipe Thread 1/4" to 1/2"

VH86 Series Valve with Actuator



- Pneumatic Actuator
- 90 / 180 Degree Actuation
- Single and Double Return

V87 Series DIN Standard Ball Valves



- Up to 7,250 psi (500 bar)
- Up to 100°C (212°F)
- DIN 1.4404, SS316L
- DIN O.D 6mm ~ 38mm
- Pipe Thread 1/8" ~ 1"
- Ball Valve to DIN Standard

DK-LOK® CNG / NGV Valves

V86 Series CNG / NGV Ball Valves



- Working Pressure: 274 bar at 120°C
- Dynamic Seat Design
- DK-LOK® 1/2" to 3/4" OD.
- Pipe Thread 1/2" to 1"

V64 Series High Flow Relief Valves



- Working Pressure: 6,000 psig
- Cracking Pressure: 15 - 5,500 psig
- Pipe Thread 1/2" to 1"
- Air, Gases, CNG, and Liquid
- Orifice: 0.404" (10.26mm)

VCH86 Series Alternative Fuel Service Ball Valves



- 2-way On-Off Valves
- Working Pressure: 274 bar at 120°C
- DK-LOK® 3/8" to 1" OD.
- Pipe Thread 3/8" to 3/4"
- Dynamic Seat Design
- Orifice: 0.472" (12.0mm)

VCT86 Series Trunnion Ball Valves



- 2-way On-Off Valves
- 3-way Switching Valves
- Working Pressure: 274 bar at 120°C
- Stainless Steel
- DK-LOK® 1/4" to 1/2" OD.
- Pipe Thread 1/8" to 1/4"

DK-LOK® Bellows, Needle, and Toggle Valves & Manifolds

V13 Series Bellows Valves



- Working Pressure: 2,500 psig
- Stainless Steel
- DK-LOK® 1/4" to 1/2" OD.
- Pipe Thread 1/4" to 1/2"
- Vacuum and High Pressure Application

V15 Series Integral Bonnet Needle Valves



- Working Pressure: 5,000 psig
- Stainless Steel, Brass, and Exotic Alloys
- DK-LOK® 1/8" to 3/4" OD.
- Pipe Thread 1/8" to 1/2"
- Regulating / Vee / Soft Seat

V16 Series Severe Service Union Bonnet Valves



- Working Pressure: 6,000 psig
- Stainless Steel and Exotic Alloys
- DK-LOK® 1/4" to 1" OD.
- Pipe Thread 1/8" to 1"
- Pipe Socket Weld 1/4" to 1/2"
- Non-rotating Globe Stem Tip

VB16 Series Integral Bonnet Needle Valves



- Working Pressure: 6,000 psig
- Stainless Steel
- DK-LOK® 1/4" to 1/2" OD.
- Pipe Thread 1/4" to 3/4"
- Compact Design
- Vee Tip / Soft Seat

VM Series Metering Valves



- Working Pressure:
 - 2,000 psig for VM1D Series
 - 1,000 psig for VM3D/VM6D Series
- Stainless Steel and Brass
- DK-LOK® 1/16" to 3/8" OD.
- Pipe Thread 1/8" to 1/4"
- Panel mount with no handle removal.

V96 Series Rising Stem Plug Valves



- Working Pressure: 6,000 psig
- Stainless Steel
- Pipe Thread 1/4" to 3/4"
- Acetal Replaceable Soft Seat
- Straight-through Roddable Orifice

V46A Series Hex. Body Needle Valves



- Working Pressure: 10,000 psig
- Stainless Steel and Carbon Steel
- DK-LOK® 1/4" to 1/2" OD.
- Pipe Thread 1/4" to 3/4"
- Packing Adjustment Externally

VG16 Series General Utility Service Needle Valves



- Working Pressure: 6,000 psig
- Stainless Steel and Carbon Steel
- Pipe Thread 1/4" to 1"
- Compact and Sturdy Design

V103 Series Toggle Valves



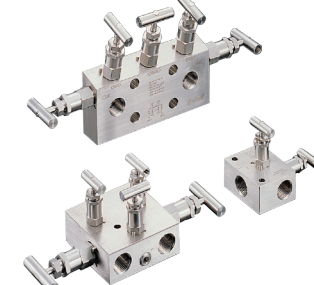
- Working Pressure: 300 psig
- Stainless Steel and Brass
- DK-LOK® 1/8" to 1/2" OD.
- Pipe Thread 1/8" to 3/8"
- Instantly open and close the valve for sampling and testing equipment.

VD3 Series Diaphragm Valves



- Working Pressure: 3,500 psig
- Stainless Steel and Brass
- DK-LOK® 1/4" to 1/2" OD.
- Pipe Thread 1/4" to 3/8"
- Instantly open and close the valve with no o-ring, no packing, nor bellows in the flow stream.

V46 / V56 Series Instrument Manifolds



- Working Pressure: 6,000 psig
- Stainless Steel and Carbon Steel
- 2, 3, and 5 Valve as Standard
- Vertical Direct / Remote Mount
- Single / Double Flange Direct Mount

VYON Series Cryogenic Needle Valves



- Working Pressure: 275 psig (20 bar)
- Up to -196°C (-320°F) ~ 371°C (700°F) with Graphite Packing
- Screwed End: 3/8" ~ 1"
- ASTM A351 CF3M and ASTM A351 CF8M

DK-LOK® Check and Relief Valves

V33 Series Poppet Check Valves



- Working Pressure: 3,000 psig
- Cracking Pressure: 1/3 - 100 psig
- Stainless Steel and Brass
- DK-LOK® 1/8" to 1" OD.
- Pipe Thread 1/8" to 1"

VP33 Series One-Piece Check Valves



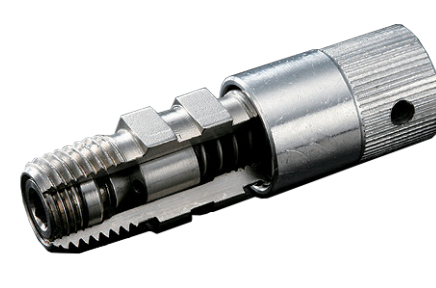
- Working Pressure: 3,000 psig
- Cracking Pressure: 1/3 - 25 psig
- Stainless Steel and Brass
- Pipe Thread 1/4" to 1/2"

VH36 Series High Pressure Check Valves



- Working Pressure: 6,000 psig
- Cracking Pressure: 1/3 - 25 psig
- Stainless Steel
- DK-LOK® 1/8" to 1" OD.
- Pipe Thread 1/8" to 1"

VA33 Series One-Piece Adjustable Check Valves



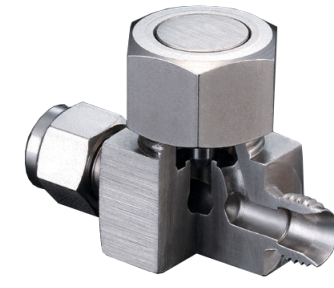
- Working Pressure: 3,000 psig
- Cracking Pressure: 3 - 600 psig
- Stainless Steel
- Pipe Thread 1/4" to 1/2"

VDA33 Series In-Line Adjustable Check Valves



- Working Pressure: 3,000 psig
- Cracking Pressure: 3 - 600 psig
- Stainless Steel
- DK-LOK® 1/4" 6mm, and 8mm OD.

VL36 Series Lift Check Valves



- Working Pressure: 6,000 psig
- Up to 482°C (900°F)
- DK-LOK® 1/4" to 3/4" OD.
- Pipe Thread 1/8" to 1/2"

V63 / V66 Series Relief Valves



- Working Pressure: 6,000 psig
- Cracking Pressure: 50 - 6,000 psig
- -28° to 204°C (-18° to 400°F)
- Stainless Steel with FKM Seals
- DK-LOK® 1/4" to 1/2" OD.
- Pipe Thread 1/4" to 1/2"

V61 Series Vent Relief Valves



- Working Pressure: 400 psig
- Set Pressure Range:
 - 0.5 - 150 psig (0.03 to 10.4 bar)
- -54° to 204°C (-65° to 400°F)
- Stainless Steel and Brass
- Pipe Thread 1/8" to 1"

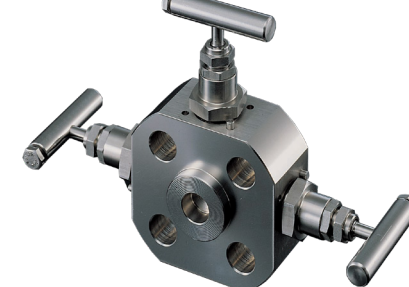
DK-LOK® Valves for Offshore Platforms

Double Block and Bleed Valves



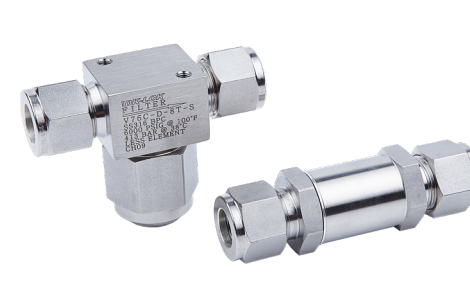
- Class 150 - 2,500 to ASME B16.5
- Up to 204°C (400°F)
- SS316
- Flange Size 1/2" to 2" (DN15 – DN50)
- Blowout Proof Valve Stem and Needle
- Fire-tested to BS 6755 Part

MONO Flanges



- Class 150 - 2,500 to ASME B16.5
- Up to 204°C (400°F)
- PTFE Packing
- Up to 454°C (850°F)
- Graphite Packing
- Flange Size 1/2" to 2" (DN15 – DN50)

V73 / V76 Series Filters



- Working Pressure:
 - 6,000 psig for V76 Series
 - 3,000 psig for V73 Series
- Stainless Steel
- DK-LOK® 1/8" to 1/2" OD.
- Pipe Thread 1/8" to 1/2"

VX36 Series Excess Flow Valves



- Working Pressure: 6,000 psig
- Up to 204°C (400°F)
- DK-LOK® 1/4" to 1/2" OD.
- Pipe Thread 1/8" to 1/2"
- Designed to stop uncontrolled release of system media.

DK-LOK® Bleed, Purge, Gauge Root, and Block & Bleed Valves

VBV Series Bleed Valves



- Working Pressure: 10,000 psig
- Stainless Steel and Carbon Steel
- Male Pipe Thread 1/8" to 1/2"
- Vent the signal line pressure to atmosphere to assist in the calibration of control valves or multi-valve manifolds.

VPV Series Purge Valves



- Working Pressure: 4,000 psig
- Stainless Steel and Brass
- DK-LOK® 1/8" to 1/2" OD.
- Pipe Thread 1/8" to 1/2"
- For bleeding, venting, and draining of system fluids.

V46 Series Gauge Root Valves



- Working Pressure: 6,000 psig
- Stainless Steel and Carbon Steel
- Pipe Thread 1/2" to 3/4"
- Valve for pressure gauge with vent port.

V46V2 Series Block and Bleed Valves



- Working Pressure: 6,000 psig
- Stainless Steel
- Male to Female 1/2" NPT
- For bleeding, venting, and draining of system fluids.

VALVE PRODUCTS

DKLOKUSA.COM



DK-LOK® Tube Fittings

Tube to Tube Union	Tube to Male Pipe	Tube to Female Pipe	Tube Stub Connector (cont.)	Tube to AN Tube	Tube to Weld End	Spare Parts	Additional Products (cont.)
Union DU	Male Connector DMC-N	Female Connector DCF-N	Male Adapter DAM-UO	AN Union DUA	Male Pipe Weld Connector DCW	Gasket DGV / DGB / DGC / DGG	Gap Gauge DIG
Union Elbow DL	Male Connector DMC-R	Female Connector DCF-R	Female Adapter DAF-N	AN Bulkhead Union DUBA	Male Pipe Weld Elbow DLW	Nut DN	Tube Depth Marking Tool DTM
Union Tee DT	Thermocouple Connector DMCT	Gauge Connector DCF-GG	Female Adapter DAF-R	Male AN Adapter DMAA	Tube Socket Weld Connector DCSW	Ferrule Set DFS	Pre-Swaging Unit DHS-2A
Union Cross DX	Male Connector for Bonded Gasket Seal DMC-G	Bulkhead Female Connector DCBF-N	Female Adapter DAF-GR	AN Adapter DAA	Tube Socket Weld Elbow DLSW	Nut-Ferrule Set DFSN	Pre-Swaging Unit DES-1A
Bulkhead Union DUB	Male Connector for Metal Gasket DMC-GB, -G	Female Elbow DLF-N	Female Gauge Adapter DAF-GG		Welding Bulkhead Union DBUW	Front Ferrule DFF	Hand Tube Bender DHTB
Bulkhead Retainer DBR	Bulkhead Male Connector DMCB-N	Female Run Tee DTRF-N	Elbow Adapter DLA			Back Ferrule DFB	Tube Cutter DTC
Bulkhead Elbow Union DBL	45° Male Elbow DLBM	Female Branch Tee DTBF-N	Run Tee Adapter DTRA	Tube to Non-Positionable O-Seal			Tube Deburring Tool DTDT
Reducing Union DUR	Male Elbow DLM-N		Branch Tee Adapter DTBA	O-Seal Straight Thread Connector DMC-UO	Plug, Cap, Insert		
Reducing Union Elbow DLR	Male Elbow DLM-R	Tube Stub Connector	Port Connector DCP / DCPZ	O-Seal Pipe Thread Connector DMC-NO	Plug DP	Additional Products	Single Ferrule Fitting
Reducing Union Cross DXR	Male Run Tee DTRM-N	Reducer DR	Reducing Port Connector DCRP	Non-Positionable SAE Male Connector DMCS-U	Cap DC	Fuse Plug DFA	DK-LOK® Z Series • Designed and manufactured to the highest quality standards.
Reducing Union Tee DTR	Male Run Tee DTRM-R	Bulkhead Adapter DAB			Tube Insert DI	Vent Protector DMD	
	Male Branch Tee DTBM-N, -R	Male Adapter DAM-N	DK-LOK® Flanges	Positionable SAE Male Elbow DLS-UP		Calibration Fitting DPCM	
	Male Branch Tee DTBM-N	Male Adapter DAM-R	DK-LOK® Flanges DF	Positionable 45° SAE Male Elbow DLBS-UP		Dielectric Fitting DEU	DK-LOK® Hose Fittings
	Male Branch Tee DTBM-R	Male Adapter DAM-G	Lab Joint Flange Connector DLJ	Positionable SAE Male Branch Tee DTBS-UP		Sanitary Fitting DSFC	Hose Adapter Fittings • Stainless Steel and Brass • 1/8" - 1" Hoses
		Male Adapter DAM-U		Positionable SAE Male Elbow ISO Parallel Thread DLM-GP		Chromatography Fitting DCHU	Push-On Hose Fitting • Stainless Steel • 1/4" - 1" Push-On Hoses
						Pre-Swaging Tool DPS	

K Series JIC Tube Fittings

Tube to Tube Union	Tube to Male Pipe	Tube to Straight Thread	Swivel Fittings
Union KU	Male Connector KMC	O-Seal G Male Connector KMC-GO	Swivel Male Connector KSMC
Union Elbow KL	Male Elbow KLM	O-Seal UNF Male Connector KMCS-U	Swivel UNF Male Connector KSMCS-U
Union Tee KT	Male Run Tee KTRM	O-Seal UNF Male Elbow KLS-UP	Swivel Female Connector KSCF
Union Cross KX	Male Branch Tee KTBM	O-Seal 45° UNF Male Elbow KLBS-UP	Swivel Elbow KSL
Bulkhead Union KUB	45° Male Elbow KLBM	O-Seal UNF Branch Tee KTBS-UP	Swivel Run Tee KSRT
Weld Bulkhead Union KBWU		O-Seal UNF Run Tee KTRS-UP	Swivel Branch Tee KSBT
Bulkhead Elbow Union KBL			
Tube Port to Tube Port	Tube to Female Pipe	Cap and Plug	Spare Parts
Fitting Port Reducer KPR	Female Connector KCF	Cap for Tube End KC	Nut KN
	Bulkhead Female Connector KCBF	Plug for Fitting Port KP	Sleeve KP
	Female Elbow KLF		Bulkhead Lok Nut KBN
	Female Run Tee KTRF		
	Female Branch Tee KTBF		

Installation Instructions

A.) Read First


This instruction applies to DK-LOK® Tube Fittings as well as DK-LOK® Z Series Tube Fittings.

DK-LOK® is supplied finger-tight and ready for immediate use. Therefore fitting disassembly is not necessary for installation.

B.) Tube-end Preparation

Prior to installation, make sure to have the tube-end cut 90 degrees, then remove any burrs from the inside and outside of the tube ends. Use a proper tube cutter and maintain a sharp cutting wheel on it.

Step 1.) Insert the tubing into the DK-LOK® tube fitting until the tubing end bottoms on the shoulder of the fitting body. *Make sure the nut is finger-tight.*



C.) DK-LOK® Installation for High Pressure or High Safety Applications

- Insert tubing on the DK-LOK® tube fitting until the tubing end bottoms on the shoulder of the fitting body.
- Wrench-tighten the nut until the tubing does not rotate by hand or moves axially in the fitting.
- Scribe the nut at the 6 o'clock position.
- Wrench-tighten the nut to the 9 o'clock position, holding the body with a backup wrench.

Only a 3/4 turn to the 3 o'clock position is required for 1/16", 1/8", and 3/16" – 2, 3, and 4 mm Tube Fittings.

D.) Inspection of Gaugeable DK-LOK® Fitting Initially Pulled-up

DK-LOK® Tube Fittings are gaugeable. This allows the installer to inspect that the make-up distance is sufficiently pulled-up on initial assembly. Refer to page 77 for Gap Gauge Operation Instructions.

DK-LOK® Gap Gauge is applicable to those DK-LOK® fittings made out of SS316, Carbon Steel, Brass, and Exotic Alloy materials.

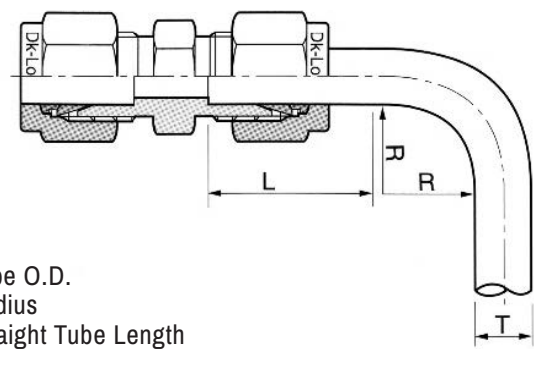
E.) Re-Assembly Instructions

- Insert the ferrules swaged tubing into the body until the front ferrule seats firmly.
- Hand-tighten the nut.
- Wrench-tighten the nut to the previously pulled-up position. At this point, a sharp rise in torque is felt.
- Tighten slowly with a wrench.

F.) Tube Handling During Installation

Do not force the tubing into the fitting when it does not go in smoothly. It may be a deformed oval.

In case the tube bend is too close to a fitting, the bend section shall enter the fitting. This may not allow the tube to be bottomed in the fitting, resulting in leaks. Keep the proper straight length of a tube, as shown in the tables below. *Do not bend a tube in the fitting. Use the tube bender prior to installation onto the fitting.*



T	L
1/16	1/2
1/8	23/32
3/16	3/4
1/4	13/16
5/16	7/8
3/8	15/16
1/2	1 + 3/16
5/8	1 + 1/4
3/4	1 + 1/4
7/8	1 + 5/16
1	1 + 1/2
1 + 1/4	2
1 + 1/2	2 + 13/32
2	3 + 1/4

T	L
3	19
6	21
8	23
10	25
12	31
14	32
15	32
16	32
18	32
20	34
22	34
25	40
28	46
30	50
32	54
38	63
50	80

Instrumentation Pipe and Weld Fittings

Thread Fittings	Thread Fittings (cont.)	Weld Fittings
Close Nipple GNC	Reducing Street Elbow GLSR	Union GUSW
Hex Nipple GNH	Male Elbow GLM	Union Elbow GLSW
Hex Reducing Nipple GNR	Tee GT	Union Tee GTSW
Hex Nipple GNH-R	Run Tee GTR	Male Connector GCMSW
Hex Nipple GNH-G	Branch Tee GTB	Female Connector GCFSW
Hex Long Nipple	Male Tee GTM	Male Elbow GLMSW
Adapter GAAMF	Cross GX	Female Elbow GLFSW
Reducing Adapter GABMF		Pipe to Tube Socket Weld GUWSW
Adapter GACMF	10K Thread Fittings	Tube to Tube Socket Weld GUTWSW
Adapter GADMF	Elbow GL-10K	
Reducing Hex Bushing GHB	Tee GT-10K	
Pipe Cap GC	Cross GX-10K	
Pipe Plug GP	Hex Nipple GNH-10K	
Hex Coupling GCG	Hex Coupling GCG-10K	
Hex Reducing Coupling GCCR	Male Adapter GAAMF-10K	
Union Ball Joint GUJ	Reducing Adapter GABMF-10K	
ISO Parallel Copper GASKET DGC	Reducing Adapter GAMF-10K	
Hollow Hex Plug GPA		Thread Fittings for Over 1"
Hollow Hex Plug GPB	Elbow GL-6K	Elbow GL-6K
Snubber Fitting GS	Tee GT-6K	Tee GT-6K
Elbow GL	Cross GX-6K	Cross GX-6K
Street Elbow GLS	Hex Nipple GNH-6K	Hex Nipple GNH-6K
	Hex Coupling GCG-6K	Hex Coupling GCG-6K